28. The method of claim 25 or 27, wherein the natural or synthetic organic polymer is selected from the group consisting of alginate, polyphosphazines, polyethlene oxide-propylene glycol block copolymers, poly(acrylic acids), poly(methacrylic acids), copolymers of acrylic acid and methacrylic acid, poly(vinyl acetate), and sulfonated polymers.

29. The method of claim 28, wherein hardening comprises cross-linking the polymer with multivalent ions.

30. The method of claim 25 or 27, wherein hardening comprises exposing the polymer to an agent selected from the group consisting of ions, pH changes, and temperature changes.

31. The method of claim 30, wherein hardening comprises allowing the polymer to interact with ions selected from the group consisting of copper, calcium, aluminum, magnesium, strontium, barium, tin, and di-, tri- or tetra-functional organic cations; anions selected from the group consisting of low molecular weight dicarboxylic acids, sulfate ions and carbonate ions.

32. The method of claim 25 or 27, wherein the cells are selected from the group consisting of cells that form cartilage, cells that form bone, muscle cells, fibroblasts, and organ cells.

33. The method of claim 32, wherein the cells that form cartilage comprise chondrocytes.

34. The method of claim 32, wherein the cells that form bone comprise osteoblasts.

35. An implant for introducing cells into an animal, said implant being a cell-polymeric composition comprising: dissociated cells and a biodegradable, biocompatible natural or synthetic organic polymer, wherein the polymer hardens into a three-dimensional open-lattice structure which entraps water molecules to form a hydrogel construct containing said dissociated cells, said hydrogel construct having a desired anatomic shape.

36. An implant for introducing cells into an animal, said implant being a cell-polymeric composition comprising: dissociated cells and a biodegradable, biocompatible natural or synthetic organic polymer, wherein the polymer hardens into a three-dimensional open-lattice structure which entraps water molecules to form a hydrogel construct containing said dissociated cells, said cell-polymeric composition being suitable for implantation into an animal before hardening.

37. The implant of claim 35 or 36, wherein the natural or synthetic organic polymer is selected from the group consisting of alginate, polyphosphazines, polyethylene oxide-polypropylene glycol block copolymers, poly(acrylic acids), poly (methacrylic acids), copolymers of acrylic acid and methacrylic acid, poly(vinyl acetate), and sulfonated polymers.

38. The implant of claim 37, wherein the cell-polymeric composition can be hardened by exposure to an agent selected from the group consisting of ions, pH changes, and temperature changes.

39. The implant of claim 38, wherein the cell-polymeric composition can be hardened by interaction with ions selected from the group consisting of copper, calcium, aluminum, magnesium, strontium, barium, tin, and di-, tri- or tetra-functional organic cations; or anions selected from the group consisting of low molecular weight dicarboxylic acids, sulfate ions and carbonate ions.

40. The implant of claim 37, wherein the cell-polymeric composition is hardened by cross-linking the polymer with multivalent ions.

41. The implant of claim 35 or 36, wherein the dissociated cells are selected from the group consisting of cells that form cartilage, cells that form bone, muscle cells, fibroblasts, and organ cells.

42. The implant of claim 41, wherein the cells that form cartilage comprise chondrocytes.

43. The implant of claim 41, where the cells that form bone comprise osteoblasts.

No new matter is entered by any of these amendments.

Remarks

These comments are filed in response to the Office Action mailed October 15, 2000, rejecting claims 1-9, 11, 12, and 14-24. The cited references are Atala, *et al.*, "Cartilage Cells as a Potential Treatment for Reflex," presented at the Annual Meeting of the American Academy of Pediatrics, Section on Urology, San Francisco, CA, October 10-12, 1992; U.S. Patent No. 4,632,120 to Nevo, *et al.*; U.S. Patent No. 5,041,138 to Vacanti, *et al.* (Vacanti A); Vacanti, *et al.*, "Selective Cells Transplantation Using Bioabsorbable Artificial Polymers as Matrices," *Journal of Pediatric Surgery*, **23**: 3-9 (1988) (Vacanti B); U.S. Patent No. 5,294,446 to Schlameus, *et al.*; U.S. Patent No. 5,266,326 to Barry, *et al.*; PCT Publication No. WO92/19195 by Dionne, *et al.*; and U.S. Patent No. 5,354,736 to Bhatnagar. The above amendments and remarks remove all grounds for rejection of the application, thereby placing it in condition for allowance.

Rejections under 35 U.S.C. 102

The Examiner rejects claims 1, 2, 4-8, 11, 14, 18, 20, and 22-24 under 35 U.S.C. 102(e) as being anticipated by Schlameus. Applicant submits that Schlameus neither discloses nor renders obvious formation of a hydrogel construct that is hardened into a desired anatomic shape